

DRIVER PACKAGE - Emotiva XDA-2 Unified Windows USB Drivers

(current as of September 12, 2014)



THESE ARE THE SAME DRIVERS INITIALLY RELEASED ON 12/12/2012 (if you have the Unified Drivers dated 12/12/2012 installed, they are still current and you do NOT have to install these drivers)

The drivers in this package are the most current drivers from C-Media for the high-speed USB interface in the XDA-2. This package includes drivers for Windows XP, Windows Vista, Windows 7, and Windows 8.0/8.1.

NOTE: Even drivers that have been thoroughly tested may offer slightly different options on different computers. Some factors that may affect this include: the specific version of Windows you are running, other programs and/or drivers installed on your computer, sound cards or other audio devices installed in your computer, other devices (especially DACs) that you have connected externally, and your computer hardware itself.

NOTE: The XDA-2, the DC-1, and the USB audio input on the XMC-1, all use the same drivers. If the USB drivers for any of these are already installed on your computer, they will work for all three devices.

These drivers work with all versions of the XDA-2.

Installing The Drivers

Installing the drivers is simple (but please read all the notes so you know what to expect):

- 1) UnZip the driver file into a folder using your favorite archiver program.
- 2) Connect the XDA-2 to your computer.
- 3) Run SETUP.EXE in the main folder of the driver package.
- 4) Follow the on-screen prompts.

NOTE: Besides the SETUP.EXE located in the main driver folder, there are additional versions of SETUP.EXE located INSIDE each individual operating system folder inside that main folder; if you receive an error message about "operating system not supported" when you run the SETUP.EXE file located in the main driver folder, you should try using the version of SETUP.EXE located inside the folder containing the drivers for your particular operating system. (The folder names include a reference to the operating system they go with. For example, the folder named U6631_6631A-120716-7.0.11.80(W7-ER-01) contains the Windows 7 drivers - note the "W7" near the end of the name.)

NOTE: You *MAY* install the drivers from a USB stick or shared network drive. However, you must **EXTRACT** the files and folders before installing the drivers (you cannot install them from **INSIDE** the ZIP archive).

NOTE: When you first connect your XDA-2 to your computer, Windows may attempt to install default drivers, and may even connect to the Internet (Microsoft Update) to do so. You may also see messages indicating that the process was **NOT** completed successfully; simply ignore them and close any dialog boxes that prompt for a response. You may allow this process to complete, but, even if it completes successfully, it does **NOT** eliminate the need to install the drivers in this package. (The default Windows drivers will **NOT** work properly with the XDA-2).

NOTE: In an ideal world, a computer used as an audio player would have a totally new copy of Windows installed on it, and no other software; this would ensure the fewest interactions, and the least processing delay, and so the best audio performance. (This isn't practical for most people, but the fewer other programs you have running, and the fewer other devices and drivers you use, the more likely you are to have good audio performance and avoid problems.) Likewise, there are whole websites dedicated just to the best way to optimize Windows for playing computer audio - and many others dedicated to choosing and configuring a player program.

NOTE: If your computer already has drivers installed for other non-Emotiva audio devices that use the C-Media CM6631 interface chip, those drivers may work with the XDA-2, or they may produce unpredictable results. We cannot provide support for issues you have with drivers not provided by Emotiva.

NOTE: The C-Media driver installer will usually prompt you to reboot your computer as part of the install process. We therefore suggest that you close any other programs you may have running before installing the drivers.

NOTE: The C-Media driver installer usually (depending on the operating system and other factors) requires that the XDA-2 be connected, turned on, and set to the USB input while the drivers are installed.

NOTE: If you are updating a previous version of the drivers, or if you have CM6631 drivers from another DAC already installed on your computer, the driver installer may prompt you to "Remove" them, and then reboot your computer. Do so when prompted, and then, after the old drivers are removed and your computer is rebooted, run the driver installer again to install your new drivers.

NOTE: If your installed drivers ever become corrupted or damaged for any reason, simply use the driver installer to remove and reinstall them. (We do **NOT** recommend using the "Remove Programs or Drivers" option in Windows because it may not remove all traces of the driver.)

Notes: Windows XP

Windows XP works well as an audio player, and may even give you satisfactory results on slow or underpowered computers. It does, however, have limited audio setup options.

Notes: Windows 7

Windows 7 works well as an audio player, but is slightly more demanding in terms of your computer hardware. (If you play audio on a PC with Windows 7 and too little memory, or too little processing power, or too many other programs running, you may experience audio dropouts. This happens more with certain players than others, and is dependent on the specific combination of hardware and software in your PC, and on which output mode you choose.

In specific, WASAPI modes tend to require more resources, and so are more likely to have problems on older PCs. If your player program offers the option, you may be able to reduce or eliminate these problems by adjusting your buffer settings. (Neither lower or higher is necessarily “better”, so simply try until you find the one that works best on your computer.)

Different players also have wildly differing resource demands, so some players will work well on almost any machine, while some are very particular, and so difficult to get to run without problems.

NOTE: By default, Windows 7 will use Direct Sound mode (kernel streaming), which will re-sample any audio files you play to the default sample rate (as set under the Advanced Properties dialog under Sound Devices in Control Panel). In this case, your player program will display the sample rate of the actual file, but the XDA-2 will display the sample rate of the audio it receives (the two will be different since Windows is re-sampling the audio); both are correct. If you don't want Windows to re-sample your files, you must choose a player program that supports WASAPI or some other “bit-perfect” mode, and select it in your player's configuration. Certain of the C-Media drivers will offer ASIO mode on some computers; whether this works well on your computer will depend on your player software (the setup options are rather complicated, and you'll have to ask your software vendor for details about how to configure them for optimum performance).

Notes: Windows 8/8.1

Windows 8/8.1 takes some getting used to because the interface is very different from previous versions of Windows, but it uses WASAPI mode, and most audio players support it and work well with it. Our Windows 8 USB drivers work well with both Windows 8.0 and Windows 8.1 .

Notes: WASAPi Mode

By default, Windows 7, Windows 8, and Windows 8.1 allow you to select a single sample rate for digital audio output, and then re-sample any digital audio files you play to that sample rate.

In Windows 7 (and newer versions), Microsoft added a special mode called WASAPI. WASAPI allows player applications to send digital audio to a sound card or DAC at their “native sample rate” (each file is played at the sample rate it was recorded at) - which is what most audiophiles prefer. WASAPI mode is built into Windows, and you don't have to enable or install it, but WASAPI is only **USED** by specific audio players that support it - and you must configure each individual application to use WASAPI. (Configuring WASAPI is somewhat different in each player application).

THESE DRIVERS SUPPORT “WASAPI PUSH MODE” BUT DO *NOT* SUPPORT “WASAPI EVENT MODE”. IN MANY PLAYERS, YOU WILL HAVE TO SPECIFICALLY SELECT WASAPI PUSH MODE AS YOUR OUTPUT MODE OR *DISABLE* WASAPI EVENT MODE. SEE OUR APPLICATION NOTES ABOUT INDIVIDUAL PLAYERS FOR DETAILS.